



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,800	12/28/2000	John A. Schlack	T721-20	8297
27832	7590	06/18/2004	EXAMINER	
EXPANSE NETWORKS, INC. 6206 KELLERS CHURCH ROAD PIPERSVILLE, PA 18947			MANNING, JOHN	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 06/18/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/750,800

Applicant(s)

SCHLACK, JOHN A.

Examiner

John Manning

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1-3</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-46 rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (US Pat No 6,698,020) in view of Srinivasan et al. (US Pub No 2002/0038455).

In regard to claim 1, the Zigmond et al. reference discloses techniques for intelligent video ad insertion. The claimed limitation of "each of the presentation streams in each set carrying the same programming but different advertisements corresponding to different market segment" is met by Figure 3. Although in Figure 3 it is shown that the ad insertion device is located in the household, it is disclosed that it can be located in a remote location. The reference fails to explicitly disclose routing units for selectively switching between the presentation streams in the set to deliver one of the presentation streams in the set to the subscribers. Srinivasan et al. teaches the use of router in a broadcasting environment. Consequently, it would have been obvious to modify Zigmond et al. with the use of router in a broadcasting environment so as to convey specific information to specific users.

Art Unit: 2614

In regard to claim 2, the claimed limitation of "an ad location detector for detecting an advertisement insertion point in a presentation streams in the set and generating a detection signal indicating this detection" is met by Figure 4, Item 70. "At an appropriate time specified by encoded data in video programming feed 52 or by the structure of video programming feed 52, the household advertisement insertion device 60 interrupts the display of the video programming feed 52" (Col 7, Lines 26-29). The AD trigger source 70 in combination with video switch 68 meet the limitation of selector coupled to the detector. The claimed switch is met by video switch 68. "A video switch 68 toggles between video programming feed 52 and selected advertisements of advertisement stream 64 and transmits the selected data feed to display device 58. Video switch 68 may be actuated at an appropriate time indicated by a triggering event delivered by advertisement trigger source 70" (Col 8, Lines 33-35).

In regard to claim 3, the combination of Zigmond et al. and Srinivasan et al. fail to explicitly disclose detecting a cue tone present in one of the presentation streams. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to detecting a cue tone present in one of the presentation streams so as to recognize the proper time to insert an advertisement. Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combination of Zigmond et al. and Srinivasan et al. with detecting a cue tone present in one of the presentation streams so as to recognize the proper time to insert an advertisement.

Art Unit: 2614

In regard to claim 4, the combination of Zigmond et al. and Srinivasan et al. fail to explicitly disclose detecting the ad insertion point based on scheduled avail time. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to detecting the ad insertion point based on scheduled avail time so as to recognize the proper time to insert an advertisement.

Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combination of Zigmond et al. and Srinivasan et al. with detecting the ad insertion point based on scheduled avail time so as to recognize the proper time to insert an advertisement.

The claimed limitation recited in claim 5 is met by Figure 5, Item 82, 83, and 88. "Ad selection criteria 83 are stored in ad insertion device 80 for use in combination with the viewer and system information 82 and/or the electronic program database 81 in order to select appropriate advertisements to be displayed to the viewer" (Col 11, Lines 31-35).

In regard to claim 6, it is inherent to the system that if the comparison of the ad selection criteria and the viewer information is not identified, that the original or default ad will be shown.

In regard to claim 7, it is noted that the examiner interprets the language of the claim to be written in the alternative, such that the claim can be met by either an "analog cable network", "digital broadcast satellite (DBS) network", "digital cable network", "switched digital video (SDV) network", "hybrid fiber coaxial (HFC) cable network", or the "Internet". The Srinivasan et al. discloses the use of routing unit in a data network, such as the Internet. "This connection

Art Unit: 2614

may be made over a telephone line to an Internet Service Provider (ISP) 18, or may be made through a backbone connection to a local area network (LAN) which may be connected to the data network 20. In the case where an ISP is used to establish the connection, the ISP will connect the system user 22 to a data network 20 such as the Internet" (Page 2-3, Paragraph 0040).

In regard to claims 8 and 9, the reference discloses that the some components of the system may be located at a remote location. The examiner interprets a remote location from the user to meet either the cable node or head end. "Other examples of suitable ad insertion devices 60 may have some components thereof at household 56 and other components at a remote location" (Col 7, Lines 53-55).

In regard to claim 10, the reference discloses that the device is located in a set top box. "In a particular embodiment of the invention, the special purpose computer embodying the ad insertion device 60 is a home entertainment system component known as a WebTV box" (Col 42-45).

In regard to claim 11, the combination of Zigmond et al. and Srinivasan et al. fail to explicitly disclose that the device is located at a Universal Service Access Multiplexer (USAM) device in a Switched Digital Video (SDV) system. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art locate devices at a Universal Service Access Multiplexer (USAM) device in a Switched Digital Video (SDV) system so as to service a plurality of users. Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combination of Zigmond et al. and Srinivasan et al.

Art Unit: 2614

with locating the device at a Universal Service Access Multiplexer (USAM) device in a Switched Digital Video (SDV) system so as to service a plurality of users.

In regard to claim 12, the claimed limitation of “advertisements directed to advertiser-specific market segments defined by different advertisers” is disclosed by the reference. “The ad selection rules of ad selection criteria 83 may be predefined by the advertisers, the video programming content provider, a third party operator of the advertisement source 62” (Col 11, Lines 50-53).

In regard to claim 13, the advertisements are directed to difference fixed market segments. “The advertisements to be shown to a viewer according to the invention are selected according to designated criteria in combination with information that characterizes the viewer, the content of the video programming feed, the geographical location of the household, or the like in order to efficiently target segments of the viewing population” (Col 6, Lines 6-12).

In regard to claim 14, the content provider in conjunction with the AD insertion device meet the limitation of a generator for generating a set of presentation streams carrying the same programming data but with different advertisements directed to different market segments. The reference fails to explicitly disclose routing units for selectively switching between the presentation streams in the set to deliver one of the presentation streams in the set the subscribers. Srinivasan et al. (US Pub No 2002/0038455) teaches the use of router in a broadcasting environment. Consequently, it would have been obvious to modify Zigmond et al. with the use of router in a broadcasting environment so as to convey specific information to specific users.

Art Unit: 2614

In regard to claim 15, the ad selection criteria 83 coupled to the advertisement repository 86 and viewer and system data 82 meet the limitation of an ad scheduler coupled to the generator. Advertisement repository 86 meets the limitation of a storage unit.

In regard to claims 16 and 17, the viewer and system data 82 provides market segment and user information so as to determine a suitable commercial. "Storage location 82 may comprise any computer-readable medium for storing data fields thereon. The viewer and system information of storage location 82 may include any of a wide range of household data for characterizing the viewer, the geographical location of the household, the features of the ad insertion device and the home entertainment system, and the like" (Col 10, Lines 29-35). The electronic program database 81 contains information regarding the advertisements. "According to one implementation, the ad selection rules are used to match the viewer and system information of storage location 82 or the programming content information of electronic program database 81 with the advertisement parameters associated with the advertisements" (Col 11, Lines 42-47).

In regard to claim 18, the claimed limitation of "advertisements directed to advertiser-specific market segments defined by different advertisers" is disclosed by the reference. "The ad selection rules of ad selection criteria 83 may be predefined by the advertisers, the video programming content provider, a third party operator of the advertisement source 62" (Col 11, Lines 50-53).

Art Unit: 2614

In regard to claim 19, the advertisements are directed to difference fixed market segments. "The advertisements to be shown to a viewer according to the invention are selected according to designated criteria in combination with information that characterizes the viewer, the content of the video programming feed, the geographical location of the household, or the like in order to efficiently target segments of the viewing population" (Col 6, Lines 6-12).

In regard to claim 20, the reference discloses a delivery network, see Figure 3-5; however, the reference fails to explicitly disclose routing units for selectively switching between the presentation streams in the set to deliver one of the presentation streams in the set the subscribers. Srinivasan et al. (US Pub No 2002/0038455) teaches the use of router in a broadcasting environment. Consequently, it would have been obvious to modify Zigmond et al. with the use of router in a broadcasting environment so as to convey specific information to specific users.

In regard to claim 21, it is noted that the examiner interprets the language of the claim to be written in the alternative, such that the claim can be met by either an "analog cable network", "digital broadcast satellite (DBS) network", "digital cable network", "switched digital video (SDV) network", "hybrid fiber coaxial (HFC) cable network", or the "Internet". The Srinivasan et al. discloses the use of routing unit in a data network, such as the Internet. "This connection may be made over a telephone line to an Internet Service Provider (ISP) 18, or may be made through a backbone connection to a local area network (LAN) which may be connected to the data network 20. In the case where an ISP is

Art Unit: 2614

used to establish the connection, the ISP will connect the system user 22 to a data network 20 such as the Internet" (Page 2-3, Paragraph 0040).

In regard to claim 22, the claimed limitation of "an ad location detector for detecting an advertisement insertion point in a presentation streams in the set and generating a detection signal indicating this detection" is met by Figure 4, Item 70. "At an appropriate time specified by encoded data in video programming feed 52 or by the structure of video programming feed 52, the household advertisement insertion device 60 interrupts the display of the video programming feed 52" (Col 7, Lines 26-29). The AD trigger source 70 in combination with video switch 68 meet the limitation of selector coupled to the detector. The claimed switch is met by video switch 68. "A video switch 68 toggles between video programming feed 52 and selected advertisements of advertisement stream 64 and transmits the selected data feed to display device 58. Video switch 68 may be actuated at an appropriate time indicated by a triggering event delivered by advertisement trigger source 70" (Col 8, Lines 33-35).

In regard to claim 23, the combination of Zigmond et al. and Srinivasan et al. fail to explicitly disclose detecting a cue tone present in one of the presentation streams. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to detecting a cue tone present in one of the presentation streams so as to recognize the proper time to insert an advertisement. Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combination of Zigmond et al. and

Art Unit: 2614

Srinivasan et al. with detecting a cue tone present in one of the presentation streams so as to recognize the proper time to insert an advertisement.

In regard to claim 24, the combination of Zigmond et al. and Srinivasan et al. fail to explicitly disclose detecting the ad insertion point based on scheduled avail time. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to detecting the ad insertion point based on scheduled avail time so as to recognize the proper time to insert an advertisement.

Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combination of Zigmond et al. and Srinivasan et al. with detecting the ad insertion point based on scheduled avail time so as to recognize the proper time to insert an advertisement.

The claimed limitation recited in claim 25 is met by Figure 5, Item 82, 83, and 88. "Ad selection criteria 83 are stored in ad insertion device 80 for use in combination with the viewer and system information 82 and/or the electronic program database 81 in order to select appropriate advertisements to be displayed to the viewer" (Col 11, Lines 31-35).

In regard to claim 26, it is inherent to the system that if the comparison of the ad selection criteria and the viewer information is not identified, that the original or default ad will be shown.

In regard to claims 27 and 30, the reference discloses that the some components of the system may be located at a remote location. The examiner interprets a remote location from the user to meet either the cable node or head end. "Other examples of suitable ad insertion devices 60 may have some

Art Unit: 2614

components thereof at household 56 and other components at a remote location” (Col 7, Lines 53-55).

In regard to claim 28, the reference discloses that the device is located in a set top box. “In a particular embodiment of the invention, the special purpose computer embodying the ad insertion device 60 is a home entertainment system component known as a WebTV box” (Col 42-45).

In regard to claim 29, the combination of Zigmond et al. and Srinivasan et al. fail to explicitly disclose detecting the ad insertion point based on scheduled avail time. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to detecting the ad insertion point based on scheduled avail time so as to recognize the proper time to insert an advertisement.

Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combination of Zigmond et al. and Srinivasan et al. with detecting the ad insertion point based on scheduled avail time so as to recognize the proper time to insert an advertisement.

In regard to claim 31, the step of “generating a set of presentation streams for each of a plurality of programming channels, each of the presentation streams in each set carrying the same programming data but different advertisements directed to different market segments” is met by content provider in conjunction with the AD insertion device. The reference fails to explicitly disclose the steps of “delivering the sets of presentation streams to a plurality of local routing stations” and “selectively switching, by at least one of the local routing stations, between the presentation streams in each set to deliver one presentation stream for at

Art Unit: 2614

least one programming channel to at least one subscriber". Srinivasan et al. (US Pub No 2002/0038455) teaches the use of router in a broadcasting environment. Consequently, it would have been obvious to modify Zigmond et al. with the use of router in a broadcasting environment so as to convey specific information to specific users.

In regard to claim 32, the ad selection criteria 83 coupled to the advertisement repository 86 and viewer and system data 82 meet the step of "generating a schedule of advertisements to be included in the presentation streams for each set" and "storing a library of advertisements to be included in the 15 presentation streams for each set".

In regard to claims 33 and 34, the steps of "generating the schedule generates the schedule of advertisements based on market segment information, avail and ad information, and subscriber information" and "the market segment information identifies advertiser-specific market segments for all advertisers associated with the library of advertisements" are met by the viewer and system data 82 provides market segment and user information. The viewer and system data 82 provides market segment and user information determine a suitable commercial. "Storage location 82 may comprise any computer-readable medium for storing data fields thereon. The viewer and system information of storage location 82 may include any of a wide range of household data for characterizing the viewer, the geographical location of the household, the features of the ad insertion device and the home entertainment system, and the like" (Col 10, Lines 29-35). The electronic program database 81 contains information regarding the

Art Unit: 2614

advertisements. "According to one implementation, the ad selection rules are used to match the viewer and system information of storage location 82 or the programming content information of electronic program database 81 with the advertisement parameters associated with the advertisements" (Col 11, Lines 42-47).

In regard to claim 35, it is noted that the examiner interprets the language of the claim to be written in the alternative, such that the claim can be met by either an "analog cable network", "digital broadcast satellite (DBS) network", "digital cable network", "switched digital video (SDV) network", "hybrid fiber coaxial (HFC) cable network", or the "Internet". The Srinivasan et al. discloses the use of routing unit in a data network, such as the Internet. "This connection may be made over a telephone line to an Internet Service Provider (ISP) 18, or may be made through a backbone connection to a local area network (LAN) which may be connected to the data network 20. In the case where an ISP is used to establish the connection, the ISP will connect the system user 22 to a data network 20 such as the Internet" (Page 2-3, Paragraph 0040).

In regard to claim 36, the claimed step of detecting "an advertisement location point for one of the presentation streams" is met by Figure 4, Item 70. "At an appropriate time specified by encoded data in video programming feed 52 or by the structure of video programming feed 52, the household advertisement insertion device 60 interrupts the display of the video programming feed 52" (Col 7, Lines 26-29). The claimed steps of determining "which one of the presentation streams in the designated set is most appropriate for selection" and selecting

Art Unit: 2614

"the most appropriate presentation stream in the designated set based on results from the determining step" are met by Figure 5, Item 82, 83, and 88. "Ad selection criteria 83 are stored in ad insertion device 80 for use in combination with the viewer and system information 82 and/or the electronic program database 81 in order to select appropriate advertisements to be displayed to the viewer" (Col 11, Lines 31-35).

In regard to claim 37, the combination of Zigmond et al. and Srinivasan et al. fail to explicitly disclose detecting a cue tone present in one of the presentation streams. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to detecting a cue tone present in one of the presentation streams so as to recognize the proper time to insert an advertisement. Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combination of Zigmond et al. and Srinivasan et al. with detecting a cue tone present in one of the presentation streams so as to recognize the proper time to insert an advertisement.

In regard to claim 38, the combination of Zigmond et al. and Srinivasan et al. fail to explicitly disclose detecting the ad insertion point based on scheduled avail time. However, the examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to detecting the ad insertion point based on scheduled avail time so as to recognize the proper time to insert an advertisement.

Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combination of Zigmond et al. and Srinivasan et al. with

Art Unit: 2614

detecting the ad insertion point based on scheduled avail time so as to recognize the proper time to insert an advertisement.

The claimed step recited in claim 39 is met by Figure 5, Item 82, 83, and 88. "Ad selection criteria 83 are stored in ad insertion device 80 for use in combination with the viewer and system information 82 and/or the electronic program database 81 in order to select appropriate advertisements to be displayed to the viewer" (Col 11, Lines 31-35).

In regard to claim 40, it is inherent to the system that if the comparison of the ad selection criteria and the viewer information is not identified, that the original or default ad will be shown.

In regard to claims 41 and 44, the reference discloses that the some components of the system may be located at a remote location. The examiner interprets a remote location from the user to meet either the cable node or head end. "Other examples of suitable ad insertion devices 60 may have some components thereof at household 56 and other components at a remote location" (Col 7, Lines 53-55).

In regard to claim 42, the reference discloses that the device is located in a set top box. "In a particular embodiment of the invention, the special purpose computer embodying the ad insertion device 60 is a home entertainment system component known as a WebTV box" (Col 42-45).

In regard to claim 43, the combination of Zigmond et al. and Srinivasan et al. fail to explicitly disclose detecting the ad insertion point based on scheduled avail time. However, the examiner takes OFFICIAL NOTICE that it is notoriously

Art Unit: 2614

well known in the art to detecting the ad insertion point based on scheduled avail time so as to recognize the proper time to insert an advertisement.

Consequently, it would have been clearly obvious to one of ordinary skill in the art to implement the combination of Zigmond et al. and Srinivasan et al. with detecting the ad insertion point based on scheduled avail time so as to recognize the proper time to insert an advertisement.

In regard to claim 45, the claimed limitation of "advertisements directed to advertiser-specific market segments defined by different advertisers" is disclosed by the reference. "The ad selection rules of ad selection criteria 83 may be predefined by the advertisers, the video programming content provider, a third party operator of the advertisement source 62" (Col 11, Lines 50-53).

In regard to claim 46, the advertisements are directed to difference fixed market segments. "The advertisements to be shown to a viewer according to the invention are selected according to designated criteria in combination with information that characterizes the viewer, the content of the video programming feed, the geographical location of the household, or the like in order to efficiently target segments of the viewing population" (Col 6, Lines 6-12).

Conclusion

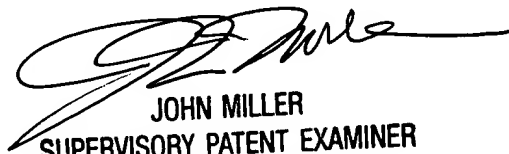
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Manning whose telephone number is 703-305-0345. The examiner can normally be reached on M-F: 7:30 - 5:00 (off every other Wednesday).

Art Unit: 2614

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W Miller can be reached on 703-305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-9695 for regular communications and 703-746-9695 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is (703) 308-HELP.

JM
June 11, 2004



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600